

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) An irradiating direction control apparatus of a lighting unit for a vehicle, said apparatus changing an irradiating direction of the lighting unit depending on an attitude of the vehicle that is based on information detected by vehicle height detecting means, said apparatus comprising:

identifying means for determining a ~~difference~~ change in a load state of the vehicle corresponding to at least one of a passenger ~~[[and]]~~ or a carrying capacity;

storage means for storing data indicative of an installation error of the vehicle height detecting means, based on a difference between a reference vehicle height value corresponding to a load state of the vehicle determined by the identifying means and an actual vehicle height value, by using the reference vehicle height value in performing an initialization for eliminating an influence of the installation error on control performed by said control apparatus; and

irradiation control means for obtaining the attitude of the vehicle based on an operation from vehicle height data corrected by using the data stored in the storage means for the data detected by the vehicle height detecting means and for controlling a direction of an optical axis of irradiation of the lighting unit for the vehicle, based on a result of the operation.

2. (Currently amended) The apparatus of claim 1, wherein the reference vehicle height value changes when at least one of an operating signal in an initialization on an assembly line of the vehicle ~~[[and]]~~ or a signal indicative of a state of a power source is detected, and said vehicle height changes when the signal is not detected.

3. (Original) The apparatus of claim 1, wherein a plurality of initializing switches distinguish a difference in a load state in the initialization.

4. (Currently amended) The apparatus of claim 1, wherein at least one of a voltage [[and]] or a current set by an initializing switch is detected to distinguish a difference in a load state in the initialization.

5. (Original) The apparatus of claim 1, wherein at least one input of an initializing switch is detected to distinguish a difference in a load state in the initialization.

6. (Original) The apparatus of claim 1, wherein information representing a residual amount of a fuel is acquired to distinguish a difference in a load state in the initialization.

7. (Original) The apparatus of claim 1, wherein a reference vehicle height value obtained when an amount of a fuel is a specified amount smaller than a fraction of a full amount of a fuel container is used in a first load state related to the vehicle, and a reference vehicle height value obtained when the amount of the fuel is a specified amount equal to or larger than the half of the full amount is used in a second load state related to the vehicle.

8. (Original) The apparatus of claim 7, wherein said fraction is one-half.

9. (Original) The apparatus of claim 1, wherein said lighting unit comprises at least one of a headlamp, a fog lamp and a cornering lamp.

10. (Original) The apparatus of claim 1, wherein said vehicle height detecting means detects a displacement of a vehicle height related to an axle portion of at least one of a front wheel and a rear wheel of said vehicle.

11. (Original) The apparatus of claim 1, wherein said storage means comprises at least one of a flash memory an EEPROM, and can be backed up to prevent erasure when power is not supplied to said storage means.

12. (Original) The apparatus of claim 1, wherein said identifying means comprises a computer-readable medium containing a set of instructions for performing said determining of said difference, and said irradiation control means comprises a computer-readable medium containing a set of instructions for performing said obtaining and said controlling.

13. (Currently amended) A method of changing an irradiating direction of ~~[[the]]~~ a lighting unit depending on an attitude of ~~[[the]]~~ a vehicle that is based on information detected by vehicle height detecting means, so as to control an irradiating direction of ~~[[a]]~~ the lighting unit for ~~[[a]]~~ the vehicle, said method comprising:

determining a ~~difference~~ change in a load state of the vehicle corresponding to at least one of a passenger ~~[[and]]~~ or a carrying capacity;

storing data indicative of an installation error of the vehicle height detecting means, based on a difference between a reference vehicle height value corresponding to a load state of the vehicle determined by the determining step, and an actual vehicle height value, by using the reference vehicle height value in performing an initialization for eliminating an influence of the installation error on control performed by said control apparatus; and

obtaining the attitude of the vehicle based on an operation from vehicle height data corrected by using the data stored by the storing step for the data detected by the vehicle height detecting means, and controlling a direction of an optical axis of irradiation of the lighting unit for the vehicle, based on a result of the operation.